

20 May 1972

PERFORMANCE DATA FOR
JOHNSON, MERCURY AND CHRYSLER
OUTBOARD MOTORS
40 THROUGH 100 H. P.

COMPARISON OF JOHNSON, MERCURY AND CHRYSLER OUTBOARD MOTOR SPECIFICATIONS.

Manufacture	H. P.	Number of Cylinders	Weight	Bore X Stroke	Displacement	Starting
Johnson	40	2	156	3.1875 x 2.750	43.9	Electric
Johnson	55	3	197	3.000 x 2.406	49.7	Electric
Johnson	100	V-4	265	3.375 x 2.50	89.5	Electric
Mercury	65	4	255	2.9375 x 2.300	62.35	Electric
Chrysler	55	2	140	3.187 x 2.800	44.70	Electric

PERFORMANCE COMPARISON OF JOHNSON, MERCURY AND CHRYSLER OUTBOARD MOTORS AT VARIOUS
LOADING CONDITIONS.

NO LOAD COMPARISON

Model	Prop Size	Pin Position	Speed At		Range At	
			Economy	Full Cruise	Throttle	Economy
Twin 40 H. P. Johnson	10-3/8 x 14	4	18.00	25.00	113.9	96.8
Twin 55 H. P. Johnson	13 x 19	2	17.31	31.03	109.5	49.2
Single 100 H. P. Johnson	12-1/2 x 18	4	22.64	35.64	103.5	74.5
Twin 65 H. P. Mercury	12 x 17	3	21.56	30.77	94.1	54.9
Twin 55 H. P. Chrysler	10-3/8 x 13-1/2	3	29.51	31.86	91.0	76.3

500 POUND ADDED LOAD COMPARISON

Twin 40 H. P. Johnson	10-3/8 x 14	4	16.22	22.50	105.5	90.0
Twin 55 H. P. Johnson	13 x 19	2	22.36	29.03	68.8	48.1
Single 100 H. P. Johnson	12-1/2 x 18	3	26.09	30.77	89.3	67.1
Twin 65 H. P. Mercury	12-1/2 x 15	3	25.18	31.58	75.5	47.4
Twin 55 H. P. Chrysler	10-3/8 x 12-1/2	3	26.67	29.51	85.2	67.8

1,000 POUND ADDED LOAD COMPARISON

Twin 40 H. P. Johnson	10-3/8 x 14	4	19.05	19.05	79.1	79.1
Twin 55 H. P. Johnson	13 x 19	2	21.82	29.27	57.6	46.25
Single 100 H. P. Johnson	12-1/2 x 16	3	22.36	29.51	76.7	64.3
Twin 65 H. P. Mercury	12-1/2 x 15	4	20.0	26.67	56.4	42.6
Twin 55 H. P. Chrysler	10-3/8 x 11-1/2	3	24.32	28.35	77.8	71.2

Approved For Release 1999/09/01 : CIA-RDP78-06815A000100120001-8

1,500 POUND ADDED LOAD COMPARISON

Model	Prop Size	Pin Position	Speed At		Range At	
			Economy Cruise	Full Throttle	Economy Cruise	Full Throttle
Twin 40 H. P. Johnson *	10-3/8 x 14	4	17.91	17.91	74.0	74.0
Twin 55 H. P. Johnson	13 x 19	2	20.34	27.91	51.9	44.6
Single 100 H. P. Johnson	12-1/2 x 16	3	25.71	27.27	61.8	59.6
Twin 65 H. P. Mercury	12-1/2 x 15	4	18.56	24.49	53.60	42.0
Twin 55 H. P. Chrysler	10-3/8 x 11-1/2	3	22.5	25.7	71.0	58.8

* Maximum Load Boston Whaler was able to carry with Twin 40 H. P. Johnson's installed was 1200 lbs. Therefore, above results are based on the 1,200 lb. payload carrying capability.

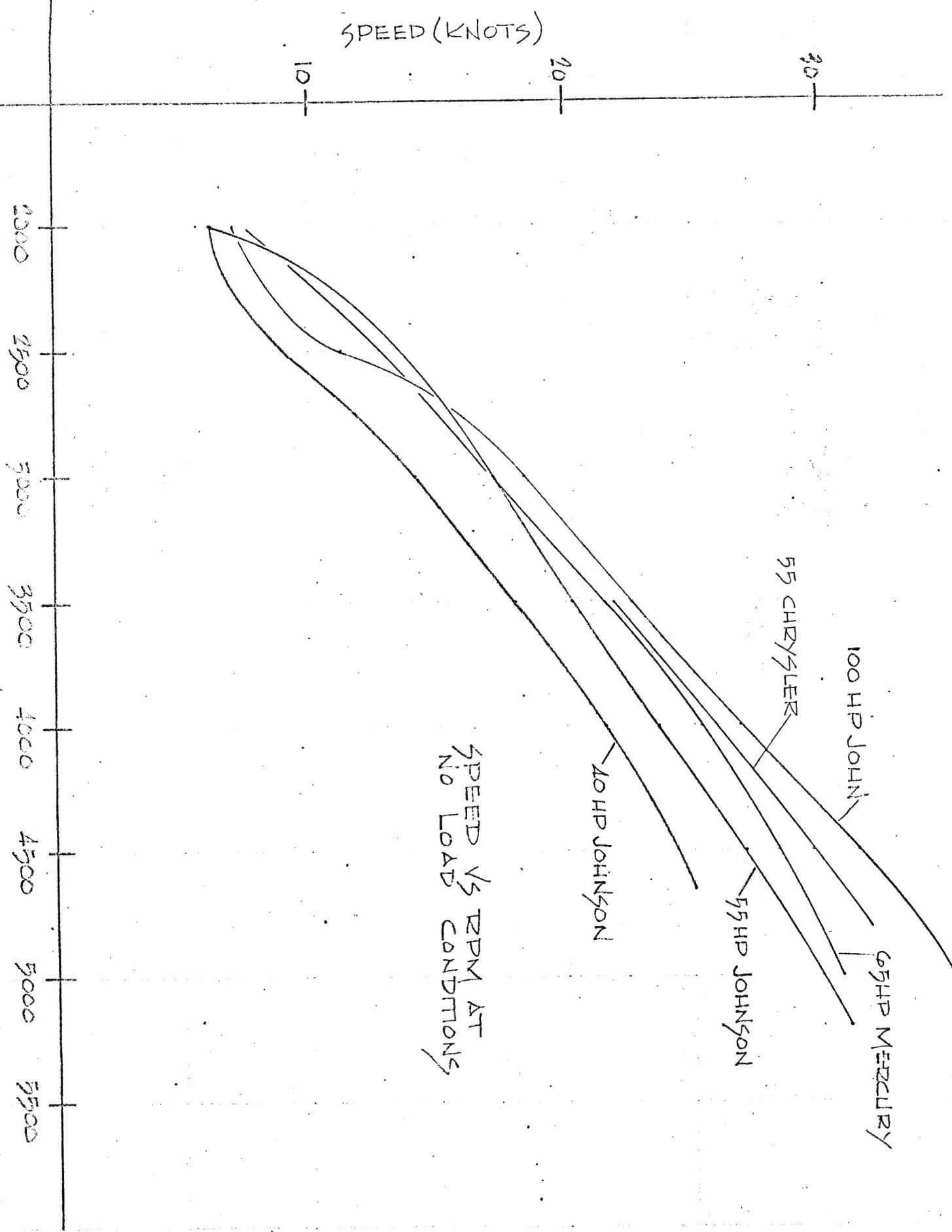
2,000 POUND ADDED LOAD COMPARISON

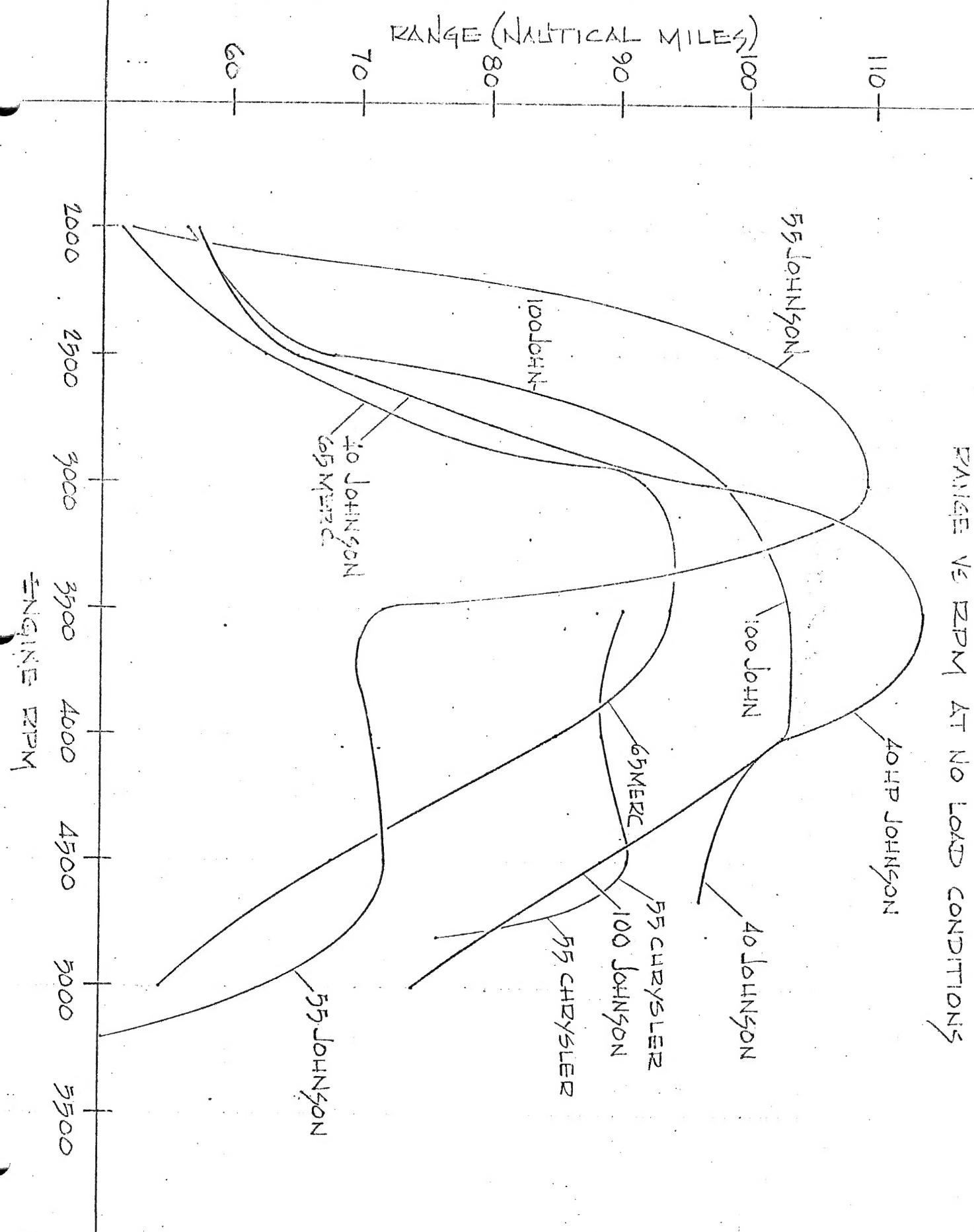
Twin 55 H. P. Johnson	13-1/4 x 17	2	21.18	26.47	45.2	40.6
Single 100 H. P. Johnson	13 x 14	3	22.22	25.35	57.1	51.8
Twin 55 H. P. Chrysler	10-3/8 x 11-1/2	3	23.84	23.84	57.5	57.5

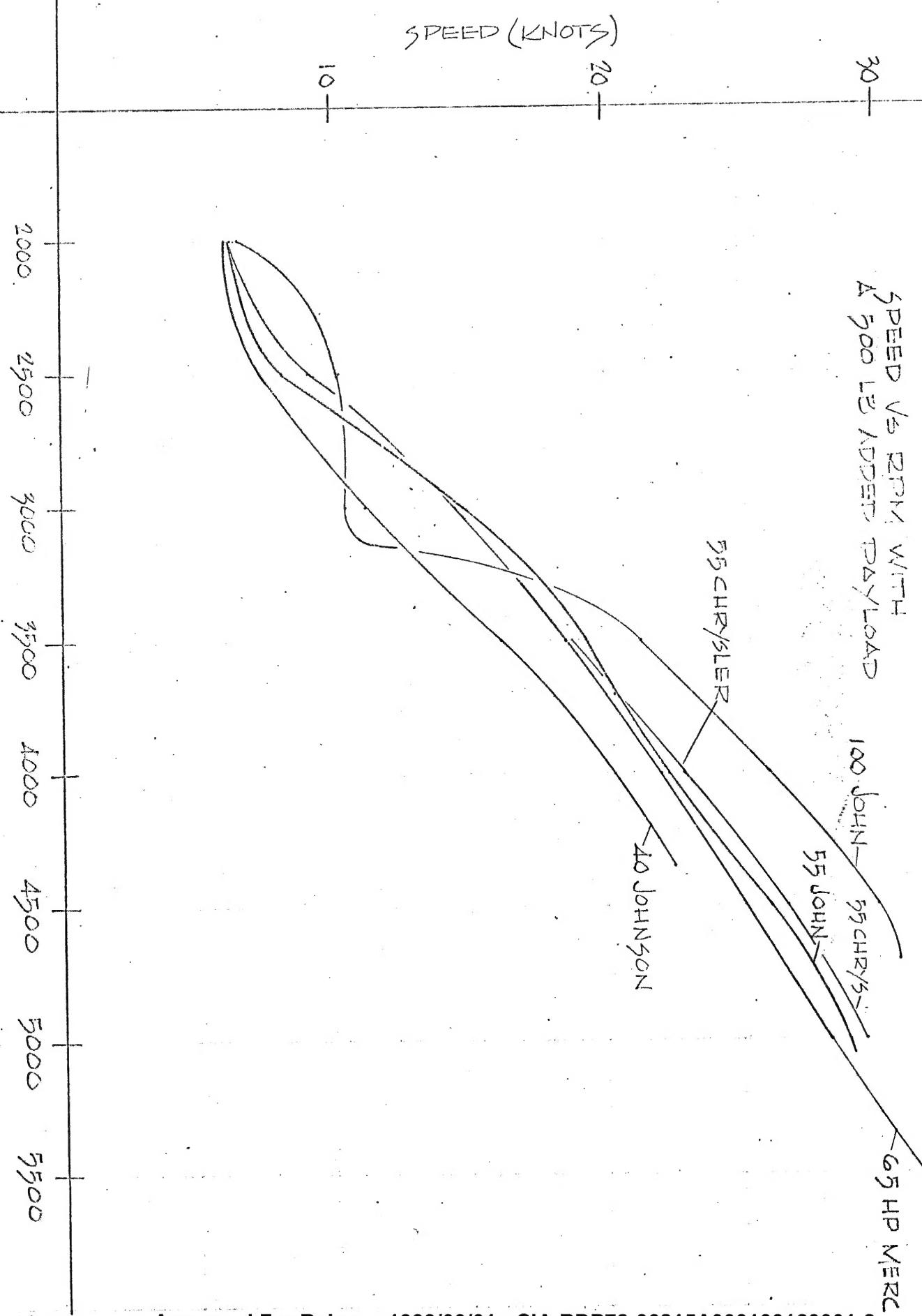
Approved For Release 1999/09/01 : CIA-RDP78-06815A000100120001-8

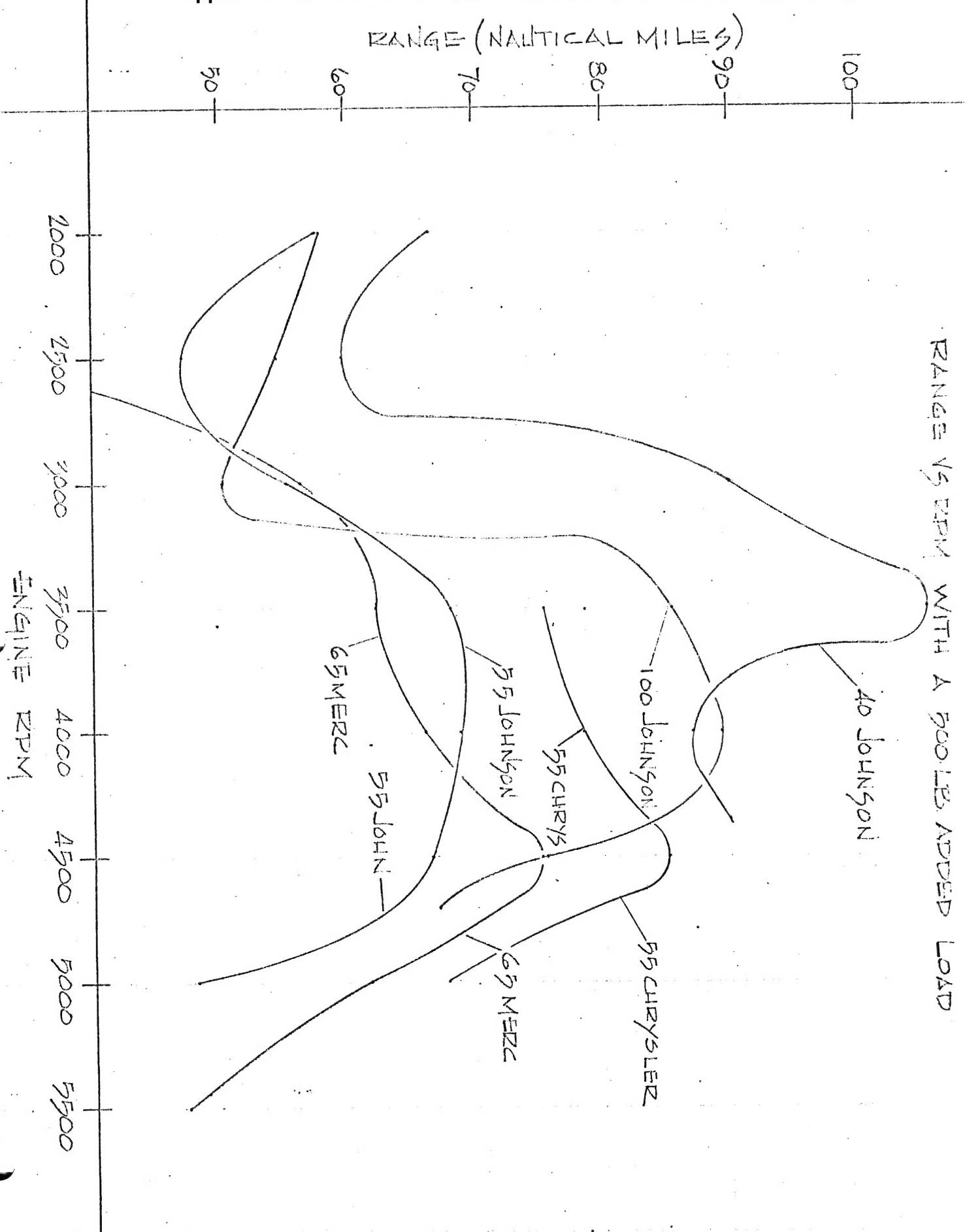
SUMMARY OF RESULTS --- ACOUSTIC EVALUATION.

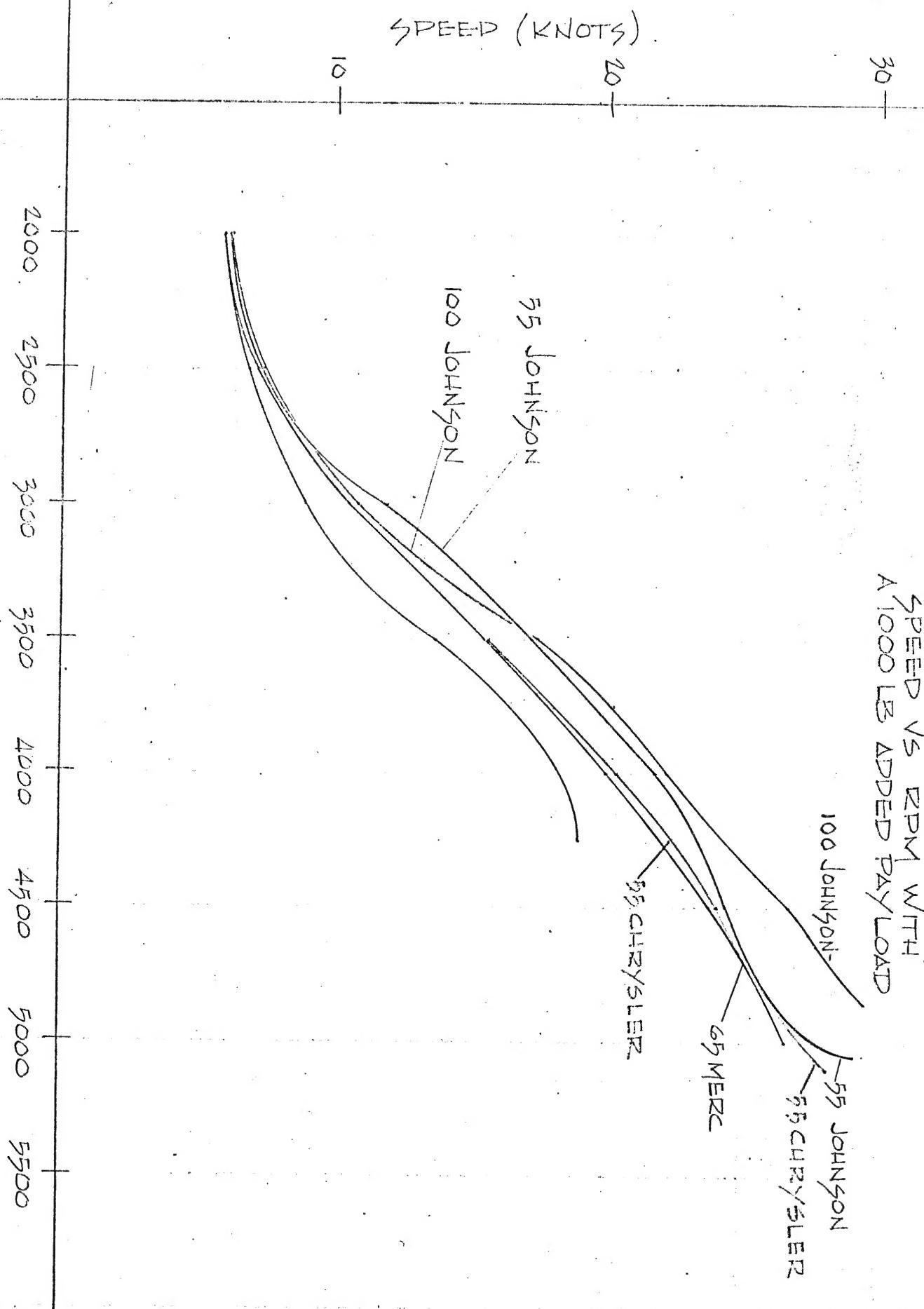
Noise Band	2,000 RPM				3,500 RPM				
	Merc 500	Merc 650	55 hp John	40 hp John	Merc 500	Merc 650	55 Hp John	40 hp John	55 hp Chrys
All Pass	86	92	88	84	95	92	95	93	90
31.5	70	72	74	72	76	73	83	73	75
63	81	94	81	82	96	87	93	86	89
125	83	84	83	79	84	91	90	90	85
250	77	79	80	77	77	82	85	83	80
500	71	73	69	71	70	73	77	76	74
1000	68	71	72	66	70	73	79	78	73
2000	65	70	73	60	66	71	78	80	68
4000	61	67	67	56	60	68	75	74	64
8000	54	59	54	52	54	60	70	66	58
16000	45	49	44	84	45	49	55	52	46
									50

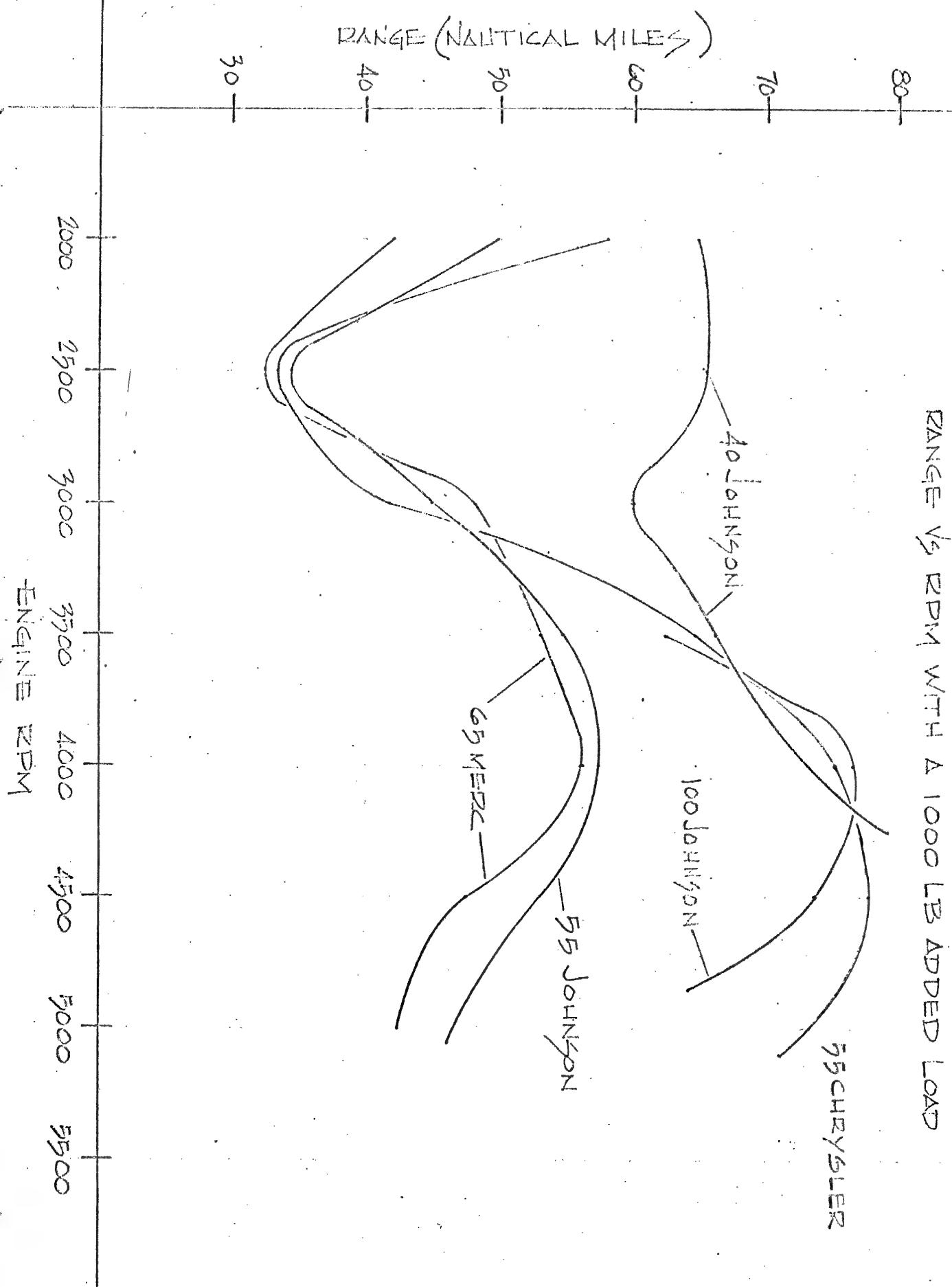


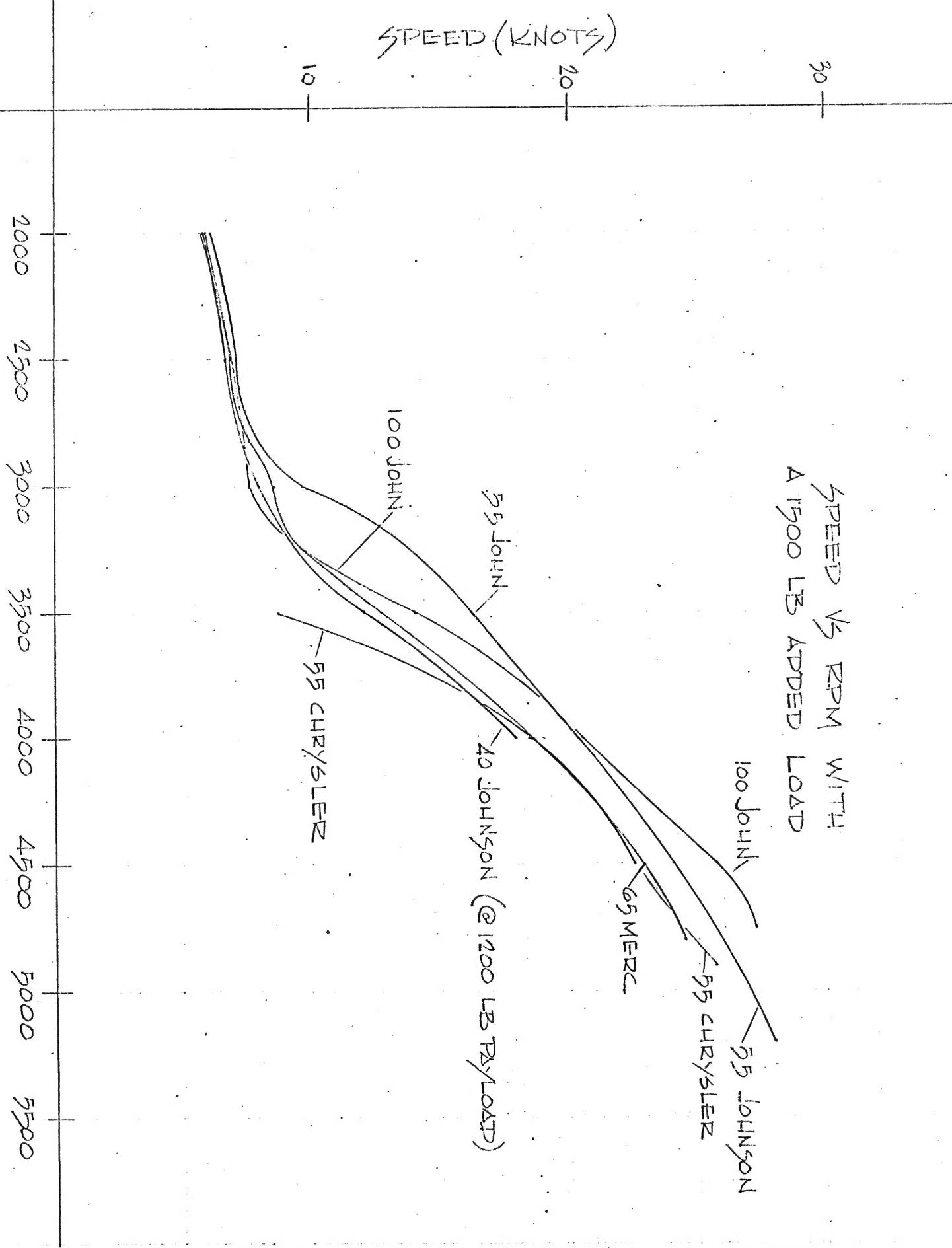












RANGE VS RPM WITH A 1500 LB ADDED LOAD

